



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,205	01/12/2005	Kyoichi Sasaki	WATAB1.002APC	9027
20995 7590 04/06/2007 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER TRAN, HOANG Q	
			ART UNIT	PAPER NUMBER
			2874	
SHORTENED STATUTORY PERIOD OF RESPONSE		NOTIFICATION DATE	DELIVERY MODE	
3 MONTHS		04/06/2007	ELECTRONIC	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/06/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@knob.com  
eOAPilot@knob.com

**Office Action Summary**

Application No.

10/521,205

Applicant(s)

SASAKI ET AL.

Examiner

Hoang Tran

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 01/04/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the US Patent to Lee (5,838,856) in view of the US Patent to Shimoji 6,435,728.

In terms of claims 1-4, 8-10, and 17 Lee discloses an optical fiber connection structure wherein optical fibers (1), shown in Fig. 4, are connected by means of a component for connecting optical fibers comprising two plugs (119), into which at least one optical fiber has been inserted respectively for aligning said optical fibers and connecting them, and an adapter (150) for fixing said plugs, which comprises that the plugs are fixed to the adapter by attaching each plug into which the optical fiber has been inserted to the adapter in a direction perpendicular to the axial direction of the optical fiber. The plug or adapter is equipped with a latch member (130) and the other has a latch engaging section (119 engages 134). The plug or adapter has a guide(s) (117) for alignment and the other is equipped with a member for alignment with engages with said guide. The plugs and adapter have a through-hole(s) for alignment (153). Lee does not disclose wherein each plug is independently detachable from the adapter. Shimoji does teach this feature to facilitate the ease of plugging and unplugging Fig 1A. **A motivation** to make such a modification to Lee would be to make

Art Unit: 2874

the functional act of unplugging and plugging easier. It would have been obvious to one of ordinary skill in the art to apply the teachings of Shimoji to the device of Lee in order to facilitate the ease of plugging and unplugging of connectors.

In terms of claims 5-7, the plug is equipped with one or plural ferrules (117), each ferrule of said plug is equipped with a ferrule aligning member capable of sliding in a direction of the center axis of the optical fiber and the ends of ferrules brought face to face with each other are located inside said ferrule aligning member (151) as a result of sliding said ferrule aligning member in a direction of the center axis of the optical fibers.

The method steps of claims 11-16 are disclosed by Lee in the explanation of the separate components functioning together. The resulting structure is the assembly of all the various components aligning as one module. The relevant steps can be found in Figure 1-4. However Lee does not teach each plug having a slidable member which is capable of sliding with respect to the two plugs in an axial direction of the optical fiber by sliding each slidable member with respect to the two plugs. Shimoji does teach a slidable member (Fig 1A and 1B) through the means of using a rod as a form alignment and flange clamps to fix the connectors together. **A motivation** to use a slidable structure would be to ensure alignment of the two connectors since the two connectors are hence detachable through plugging and unplugging user functions. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Shimoji with the connector of Lee to ensure alignment is proper in a connector capable of being unplug and plug-in together.

***Response to Arguments***

Applicant's arguments with respect to claims 1, 8, 10, 11 and 17 have been considered but are moot in view of the new ground(s) of rejection. Applicant filed newly amended claims of which were consider on the merits. The new rejections now address the newly added amended limitations. The argument in regards to the prior art of Lee was persuasive therefore new grounds of rejection were established.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang Tran whose telephone number is 571-272-5049. The examiner can normally be reached on 9:00AM - 5:00 PM.

Art Unit: 2874

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ht



Hoang Tran  
AU 2874  
March 28, 2007



SUNG PAK  
PRIMARY EXAMINER